Dil Eğitiminde Daha İnsancıl Yaklaşımlar ve Beyin Baskınlığının Öğrencilerin Akademik Başarı ve İngilizce Öğrenmeye Yönelik Tutumları Üzerindeki Etkileri

The Effects of More Humanistic Approaches to Language Teaching and Hemispheric Dominance on Students' Academic Achievements and Their Attitudes towards Learning English

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Öz

Bu araştırmanın amacı, "sinirdilbilimsel programlama ilkelerine uygun öğretim programlarının ve beyin baskınlığının öğrencilerin İngilizce öğrenmeye yönelik tutumlarına ve akademik başarı düzeyine etkisini" belirlemektir. Araştırma örneklemine 2004-2005 Öğretim Yılı Bahar Dönemi'nde Milli Eğitim Bakanlığı'na bağlı bir Anadolu Lisesi Hazırlık Sınıfı öğrencilerinin oluşturduğu toplam 52 öğrenci dahil edilmiştir. Araştırma deseni olarak, öntest-sontest kontrol gruplu yarı deneysel desen kullanılmıştır.

Araştırmada veri toplama aracı olarak, Altunay (2002) tarafından geliştirilen ve 17 maddeden oluşan, Cronbach Alpha güvenirlik katsayısı 0,96 olan "İngilizce Öğrenmeye Yönelik Tutum Ölçeği" kullanılmıştır. Türkçeye uyarlaması, geçerlik ve güvenirlik çalışması Kök (2005) tarafından yapılan "Beyin Baskınlığı Envanteri" nin Cronbach Alpha güvenirlik katsayısı ise 0,87 olarak bulunmuştur. İki ölçeğe ek olarak öğrencilerin akademik başarılarını ölçmek için, KR-20 güvenirlik katsayısı 0,72 olan 30 maddelik çoktan seçmeli test uygulanmıştır. Verilerin analizinde t-testi uygulanmıştır. Anlamlılık düzeyi ise 0,05 olarak alınmıştır.

Araştırma sonucunda, deney grubundaki sol beyni daha baskın olan öğrenciler ile kontrol grubundaki sol beyni daha baskın olan öğrenciler arasında İngilizce akademik başarıları açısından istatistiksel olarak anlamlı bir fark görülememiştir. Sağ beyni baskın olan deney ile kontrol grubu öğrencileri arasında deney grubu lehine, istatistiksel olarak anlamlı bir fark görülmüştür. Deney grubu öğrencilerinin İngilizce öğrenmeye yönelik olumlu tutumları artmış ve deney grubu lehine istatistiksel olarak anlamlı bir farklılık gözlenmiştir.

Anahtar Sözcükler: Sinirdilbilimsel programlama, beyin baskınlığı, İngilizce öğrenmeye yönelik tutum, başarı

Abstract

The purpose of the research is to determine the effects of the language curricula designed in compliance with the principles of Neuro Linguistic programming, and brain dominance on the students' academic achievement and their attitudes towards learning English. The population of this study was 52 students (25 females, 27 males) studying at an Anatolian high school preparatory class in the spring term of the 2004-2005 academic year. The research presented in this study was based on a randomized pre-test post-test control group design.

In this research, an attitude scale which was designed by Altunay (2002) consisting of 17 items, and whose Cronbach Alpha coefficient reliability was .96, was used. The Cronbach Alpha reliability of the brain dominance inventory, which was translated and adapted into Turkish by Kök (2005) was .87. In addition to the two scales listed above, to assess the achievement of the students, they were given a 30-item multiple choice achievement test, the

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KR-20 reliability of which was .72. In the analysis of the data, t-test was administered. The significance level of the tests was .05.

As the findings suggest, no significant difference was found between the left-brain dominant students in the experimental group and those in the control group. However, there was a statistically significant difference between the right brain students in the experimental group and those in the control group in favor of the experimental group, both in academic achievement and in their attitudes towards learning English.

Key Words: Neurolinguistic programming, brain dominance, attitude towards learning English, achievement

#### Introduction

NLP, which stands for "Neuro-Linguistic Programming can be described as sense-language programming" (Gün, 2001, 13). According to Revell and Norman (1996, 14) "The neuro part of NLP is concerned with how we experience the world through our five senses and represent it in our minds through our neurological processes."

The Linguistic part deals with how the language people use shapes and reflects the experiences of individuals. Language is used in oral communication. It is also used to embody the beliefs about the world and about life. When the way people speak and think about things changes, the behavior may change as well.

The programming part of NLP is concerned with the training of individuals to think, speak and act in new and positive ways, in order to release the potential and reach the heights of achievement that people only dreamt of previously (Revell and Norman, 1996).

NLP has gone far beyond the domain of psychotherapy, where it was originated, and the basic principles of it have contributed to almost every aspect of daily life from increasing motivation in sports to education, personal growth, business administration and in particular marketing and learning principles (Cameron-Bandler, 1986; Gün, 2002; Gün, 2003; O'Connor and Lages, 1984).

Lightbown and Spada (1999, 58) state that "learners have clear preferences for how they go about learning new material". They also maintain that knowing and considering individual characteristics can create better learning conditions in the classroom and make it possible for almost all learners to succeed in language learning. Therefore, while practicing NLP in English learning environments, the fact that the teacher provides the learners with visual, auditory and kinaesthetic activities can enhance learners' motivation thereby increasing their academic achievement (Revell and Norman, 1999).

Another point to increase the functions of NLP is the concept of hemispheric brain dominance. Knowing the characteristics of the hemispheric dominance by the families and educational institutions will positively affect the interfamily communication, and providing the students with a learning environment in which the characteristics of both of the hemispheres of the brain are taken into consideration will enable the students to have better achievement and more positive attitudes towards learning English (Kök, 2005).

Although the anatomical differences between the left and right hemispheres are not so significant, the way they function differs greatly from one another. Control over the body's functions and sensation is divided between the two hemispheres evenly, but in a crossed fashion. In other words, the left hemisphere controls the right side of the body and vise versa (Hergenhahn and Olson, 2005, 394).

"The left-brained person takes little pieces, lines them up, arranges them in logical order, and arrives at a convergent conclusion. The right-brained person thinks whole-to-part, holistically. The child with a dominant right hemisphere starts with the answer, a total concept, or perceives the whole pattern and discovers a divergent conclusion." (www.leapingfromthebox.com/art/kmg/learningstyles2.html.)

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Left-hemispheric learners think in symbols; they deal with symbols, they can function with symbols. Right-hemispheric learners deal with the concrete; they learn by doing, touching, moving, being in the middle of things.

The left-brain approaches life sequentially, while the right brain floats randomly through life's experiences.

Analytical ability of mind is linked to the left-brain and creativity is to the right brain (Gredler, 2005, 100). "The left hemisphere is associated with logical, analytical thought, with mathematical and linear processing of information. The right hemisphere perceives and remembers visual, tactile, and auditory images; it is more efficient in processing holistic, integrative, and emotional information" (Brown, 2000).

Left-hemispheric children can deal with reality, with the way things are. Left-hemispheric children are very much affected by the environment and will adjust to it. If something is presented to them, they will shift and react. If something is not there for left-hemispheric children, it does not exist for them.

Left-hemispheric children have a strong sense of time while right-hemispheric children have very limited sense of it. They simply do not comprehend when you set time limits. They cannot think in any terms except the here and now. "Recent studies strongly suggest that left brain is also involved in some certain non-linguistic functions, specifically those related to the perception of time: for example, the left hemisphere is superior to the right in judging temporal order, deciding which of two stimuli was presented first" (Krashen, 1988: 70).

Gibson (2002) pinpoints that learning strategies of children differ from each other in terms of brain dominance and the brain dominance has certain effects on their learning and communication.

Considering the learning characteristics and new ways to help learners get to know their learning styles through which they obtain process and retain the knowledge and language skills, if new approaches to language teaching and learning could be used rather than the traditional language teaching, which could be defined as *teacher centered and grammar based instruction*, language learning might be more effective and enjoyable. In this particular study, whether or not the aforementioned points can be put into practice will be tested.

Purpose of the study

The purpose of this investigation is to study the effects of teaching based on the principles of neurolinguistic programming and brain dominance on the students' attitudes towards learning English and their academic achievements.

## Method

The population of this study is the 52 students (25 female, 27 male) from an Anatolian high school English preparatory class, who were studying reading and coursebook practices in the Spring Term of the 2004-2005 Academic Year.

Model of the research

The research presented in this study was based on a randomized pretest posttest control group design.

Data collecting instruments

The data of the research were gathered by a five-point Likert-type attitude scale, a multiple choice achievement test for English and brain dominance inventory.

The independent variable of the research was the teaching practices based on the principles of NLP. The dependent variables of the research, on the other hand, were the students' attitudes towards learning English and their academic achievements. Therefore, to measure the dependent variables of the research, the following scales were used: an attitude scale, which was designed by Altunay (2002), which consisted of 17 items, and, whose Cronbach Alpha coefficient reliability was .96, was used. Students could get minimum 17 and maximum 85 points out of the attitude scale. High points indicated positive attitude. To determine the brain dominance of the students, the brain dominance inventory, which was re-arranged by Davis (1994), was used. The Cronbach Alpha reliability of the brain dominance inventory, which was translated and adapted into Turkish by Kök (2005), was .87. In addition to the two scales listed above, the students were given a 30-item multiple choice achievement test, the KR-20 reliability of which was .72 to assess students' achievement. In the analysis of the data, t-test significance test was administered. The significance level of the tests was .05.

The achievement test, which, initially, consisted of 76 multiple-choice items, was designed to cover the six main groups of target behaviors to provide objectivity in scoring and evaluation and due to the practicality of administration of the multiple-choice items (Heaton, 1990; Huges, 2003). To provide content validity, opinions of three lecturers, who were specialized in the field were taken. The trialing application of the test was carried out with 182 first and second grade students of Dokuz Eylül University, Buca Faculty of Training, English Language Teaching Department. After item analysis of the test according to KR-20 method, low reliability test items were eliminated and the number of questions was dropped down to 30 to exemplify all six groups of behaviors, and its reliability was calculated as .72.

## Analysis and Interpretation of Data

In the analyses of the obtained data, SPSS for Windows 11.0 Statistics Program was used. While analyzing the data, the statistical techniques Frequency, Arithmetic Means, Percentage and Standard Deviation were made use of. When the two groups were compared and contrasted, the t-Test was administered. The significance level was taken as .05.

## Statement of the problem

What are the effects, if any at all, of instruction designed according to the principles of NLP and those of traditional education on the students' attitudes towards learning English and their academic achievements?

## Research Questions:

- 1. Are there any significant differences between the English academic achievement levels of students who received language education based on the principles of NLP and those students who received traditional language education with regard to brain dominance variable?
- 2. Are there any significant differences between the attitudes of students towards learning English who received language education based on the principles of NLP and those students who received traditional language education with regard to brain dominance variable?

# Findings and Interpretation

The first research question is: "Are there any significant differences between the English academic achievement levels of students who received language education based on the principles of NLP and those students who received traditional language education with regard to brain dominance variable?

Table 1.

Tablo 1.

Differences Between The English Academic Achievement Levels of Experimental and Control Groups With Regard to Brain Dominance Variable, and The Results of t-Test

Brain Dominance	Groups	N	$\overline{X}$	sd	se	t Value	p value	Significance level	
Left Brain	Ex. Pre.	12	16,33	12,02	3,47	.13	.89	p> .05	
	Cont. Pre.	5	15,40	14,15	6,32	.13	.07		
	Ex. Post.	12	57,41	12,65	3,65	.25	.80	p> .05	
	Cont. Post	5	55,60	15,96	7,13	.23	.00		
Right Brain	Ex. Pre.	13	14,38	10,76	2,98	1.51	.14	> 0E	
	Cont. Pre.	20	20,25	10,93	2,44	1.51	.14	p> .05	
	Ex. Post.	13	59,46	12,44	3,45	2.09	.04	C OE*	
	Cont.Post	20	47,07	18,83	4,21	2.09	.04	p<.05*	

Since there was only one whole brained student from each group, , according to the results of the brain test inventory, they were not included in the research analysis as they cannot be studied statistically. Therefore, only right and left brained students were studied.

As it can be observed in Table 1, there is a slight difference (.97) between the groups in favor of the experimental group according to the pretest results. No statistically significant difference was observed at the end of the treatment even though the difference increased up to 1,81.

With the right brained students, interesting results were observed. Although the experimental group students started the education at a level which was 5,87 point lower than the control group according to the pretest results, they caught up with the control group students and outperformed them at the end of the educational term and got a 12,39 point higher than the control group students. The difference between the groups is statistically significant at t=2,09, p<.05 level.

Table 2.

Differences Between The Achievement Levels of The Groups With Regard to The Results Between The Pre and Post Tests and The Results of t-Test

Brain Dominance	Groups	N	$\overline{X}$ post- $\overline{X}$ pre = $\overline{X}$ difference	Sd	Se	t Value	p Value	Significance Level	
Left Brain	Exp.	12	41,08	13,09	3,78	.13	.89	p>.05	
	Cont.	5	40,20	10,52	4,70	.13			
Dialet Praire	Exp.	13	45,07	9,79	2,71	2.07	00	m / 01*	
Right Brain	Cont.	20	26,80	19,84	4,43	3,07	.00	p< .01*	

The achievement levels of the students as a result of the measurement between the pre and post tests—with regard to their brain dominance: Left brain dominant experimental group students' progress level was  $\overline{X}$  difference=41,08; and the control group students' was  $\overline{X}$  difference=40,20. The difference between the groups was .88 (at t=0,13, p>.05 level), which was not statistically significant. Right brain dominant experimental group students' progress level, on the other hand, was  $\overline{X}$  difference=45,07, and the control group students' was  $\overline{X}$  difference=26,80. The 18,27 point difference observed between the groups in favor of the experimental one was statistically significant at (p=.00, p<.01) level.

The reason why right brain dominant students benefited more from NLP based instruction was that according to Vitale (1982), they make use of their "imagination" more, and that they take the teacher as a guide who facilitates education rather than an authority; and that they

involve more sensory perceptions; especially their visual perceptions are far better (Cleveland, 1987).

Table 3.

According to Brain Dominance Variable, The Differences of Academic Achievements Obtained After Calculating The Differences Between The Pre and Post Test Scores of The in-Group And Out-Group Students, And The t-Test Results

Groups	Brain Dominance	N	$\overline{X}$ post- $\overline{X}$ pre = $\overline{X}$ difference	Sd	Se	t Value	p Value	Significance Level
Experimental	Left	12	41,08	13,09	3,78	96	20	> 0F
	Right	13	45,07	9,79	2,71	.86	.39	p> .05
Control	Left	5	40,20	10,52	4,70	1.44	.16	n> 05
Control	Right	20	26,80	19,84	4,43	1,44	.16	p> .05

When the experimental and the control groups were studied with regard to their hemispheric dominance, their achievement levels were as follows:

The progress level which was obtained by comparison of the pre and post test results of the left brain dominant students in the experimental group was  $\overline{X}$  difference=41,08, and those of the right brain dominant students was  $\overline{X}$  difference=45,07. The 4,01 point difference obtained by the right brain dominant students was not found statistically significant at (t= .86, p>.05) level.

The progress level which was obtained by comparison of the pre and post test results of the left brain dominant students in the control group was  $\overline{X}$  difference=40,20, and those of the right brain dominant students was  $\overline{X}$  difference=26-80. The 13,40 point difference obtained by the left brain dominant students was not found statistically significant at (t= 1,44, p>.05) level.

The second research question is "Are there any significant differences between the attitudes of the students towards learning English who received language education based on the principles of NLP and those students who received traditional language education with regard to brain dominance variable?"

Table 4.

Differences Between The Attitudes of The Students Towards Learning English in Experimental and Control Groups With Regard to Brain Dominance Variable, And The Results of t-Test

Brain Dominance	Groups	N	X	Sd	Se	t Value	p Value	Significance Level	
	ExPre.	12	3,17	.44	.12	.35	.72	p>.05	
Left Brain	Cont.Pre.	5	3,29	.93	.41	.00	., _		
Ecit Bruin	Ex. Post.	12	3,45	.52	.15	2,46	.02	p<.05*	
	Cont.Post	5	2,71	.65	.29	2,40	.02		
	ExPre.	13	3,23	.64	.17	1.25	.21	p>.05	
Right Brain	Cont.Pre.	20	2,84	.98	.22	1,20	1	p* .05	
O	Ex. Post.	13	3,59	.63	.17	2 52	00	n/ 01*	
	Cont.Post	20	2,80	.62	.13	3,53	.00	p<.01*	

As can be observed very clearly in the table, the left brain dominant students in both of the groups, experimental and control started the education at about the same level in terms of their attitude towards learning English. The arithmetic mean of the left brain dominant students in the experimental group was  $(\overline{X}=3,17)$ , and that of the control group students was  $(\overline{X}=3,29)$ . However, after the eight-week education, as the positive attitude of the experimental group students increased  $(\overline{X}=3,45)$ , that of the control group students decreased  $(\overline{X}=2,71)$ . Therefore, while there was no significant difference between the groups as a result of the pretest scores,

there was a statistically significant difference between the groups in favor of the experimental group when the post test scores were examined (at t = 3.53, p< .05 level).

The right brain dominant students in the experimental group, though not significantly different from those of the control group, started the education with a .39 point difference (experimental group,  $\overline{X}$  =3,23, and the control group,  $\overline{X}$  =2,84). At the end of the research period, while a comparatively significant difference was observed on the part of the experimental group ( $\overline{X}$  =3,45, almost no difference ( $\overline{X}$  =2,80) was observed on the part of control group students. The attitude difference between the experimental and the control groups was found statistically significant in favor of the experimental group (at t=3,53, p<.01 level).

Table 5.

Differences Between The Attitudes of The Students Towards Learning English in Groups With Regard to The Results Between The Pre and Post Tests and The Results of t-Test

Brain Dominance	Groups	N	$\overline{X}$ post - $\overline{X}$ pre = $\overline{X}$ difference	Sd	Se	t Value	p Value	Significance Level
Left Brain	Experimental	12	.27	.65	.18	2.50	.02	p<.05*
	Control	5	57	.51	.22	2,59		
Right Brain	Experimental	13	.36	.74	.20	1 11	16	p> .05
	Control	20	04	.83	.18	1,41	.16	

The attitude levels of the students as a result of the measurement between the pre and post tests with regard to their hemispheric dominance: When Table 5 is examined, an increase ( $\overline{X}$  difference= .27) can be observed in the attitude level of the left brain dominant experimental group students, whereas, there is a decrease ( $\overline{X}$  fark=- -.57) in the attitude level of the left brain dominant control group students. When the attitude differences of the left brain dominant students in the experimental and control groups are compared, a statistically significant difference can be observed between the groups in favor of the experimental group (at t=2.59, p<0,05 level).

As for the attitude differences between the right brain dominant students in the experimental and control groups, between the results of pre and posts tests, the attitude of both of the groups decreased relatively–experimental group,  $\overline{X}$  difference=-.36, and the control group,  $\overline{X}$  difference=-.04. Therefore, no statistically significant difference was observed between the groups.

Table 6.

According to Brain Dominance Variable, The Differences of Attitude Obtained After Calculating The Differences Between The Pre and Post Test Scores of The in-Group And Out-Group Students, and The T-Test Results

Groups	Brain Dominance	N	$\overline{X}$ post - $\overline{X}$ pre = $\overline{X}$ difference	Sd	Se	t Value	p Value	Significance Level	
Experimental	Left	12	.27	.65	.18	20	.76	p> .05	
_	Right	13	.36	.74	.20	.29	.76	p> .05	
Control	Left	5	57	.51	.22	1 25	.18	n> 05	
Control	Right	20	04	.83	.18	1,35	.10	p> .05	

When the experimental and the control groups were studied within themselves with regard to their hemispheric dominance, their attitude differences were as follows:

The attitude level difference obtained by comparison of the pre and post test results between the left brain dominant and right brain dominant students in the experimental group was  $\overline{X}$  difference=.11 (left brain,  $\overline{X}$  difference= .27 and right brain  $\overline{X}$  difference=.36). This difference was not considered statistically significant (at t= .29, p>.05 level).

When the attitude level difference obtained by comparison of the pre and post-test results between the left brain dominant and right brain dominant students in the control group was examined, it could be observed easily that the attitude levels of the both groups decreased slightly. The attitude level difference between the left brain dominant and right brain dominant students in the control group was  $\overline{X}$  difference=-.28 (left brain,  $\overline{X}$  difference=-.57 and right brain  $\overline{X}$  difference=-.29. This difference was not considered statistically significant (at t= 1,35, p>.05 level), either.

Conclusions-Discussions and Suggestions:

1. No statistically significant difference was observed between the results of the achievement tests given as the pre-test to the two groups of students – left brain dominant and right brain dominant – in the beginning of the research. After the instruction, no statistically significant difference was observed between the left-brain dominant students in the experimental and the control groups regarding their academic achievements in English. On the other hand, between the right brain dominant students in the experimental group, who received education based on NLP principles and the right brain dominant students in the control group, who received traditional language education, statistically significant differences were observed in favor of the experimental group.

Jensenn (1994, 80) points out that "the researcher teams of Fiske, Taylor, Nisbett, and Ross say "The most powerful influences on your learners' behaviors are concrete, vivid images. Neuroscientists might say that it is because 1) the brain has an attentional bias for high contrast and novelty; 2) 90% of the brain's sensory input is from visual sources; and 3) brain has an immediate and primitive response to symbols, icons and strong, simple images."

These characteristics are usually associated with the brain functions which the right brain dominant students use while learning. Neurolinguistic Programming helps students, with its principles, representational systems, core concepts, teaching techniques, identify and use which one(s) of the five senses the students most use and makes the classroom teaching and learning more effective including activities which involve more representational systems. This might explain why and how right brain dominant students benefited more from NLP based instruction.

2. When whether there was a difference between the attitudes of the students who received English Language education designed in compliance with the principles of Neurolinguistic Programming and those of the students who were educated with the traditional methods with regard to the brain dominance variable was studied, it could be observed that the left brain students both in the experimental and control groups started their education at about the same level of attitude towards learning English. After the instruction was completed, while the attitude level of the left brain students in the experimental group increased, that of the control group decreased. Therefore, no statistically significant difference was observed as a result of the pre-test; yet, statistically significant differences were observed after the post-test results were analyzed.

When the attitudes of the right brain students both in the experimental and control groups were studied, there were the differences between the right brain students in both the experimental and the control groups in favor of the experimental group. However, while the difference was not statistically significant at the pretest measurements, as the positive attitude towards learning English increased after the education, it was statistically significant at the post-test measurements.

The reason for this could be accounted for the fact that the right brain dominant students benefit from NLP based activities more than the left brain dominant students because while learning, the principles and core concepts upon which the teaching techniques and procedures are founded are more suited to the learning strategies of the right brain dominant students. For

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example, Students take "imagination" as their base in learning" (Vitale, B.:1980, 15), assuming the teacher as a guide who facilitates language learning rather than an authority; utilizing more senses while learning, especially having better visual senses (Cleveland, 1987: 61).

When the attitude differences, which were found as a result of pre-post tests measurements, were studied, a positive increase was detected at the level of attitude of both the left brain dominant and right brain dominant students in the experimental group; however, a comparative decrease was observed at the attitude level of the students of the control group of both left and right brain dominance.

When the experimental and the control groups were compared and contrasted within the same group from the perspective of the brain dominance with regard to their attitudes towards learning English, the attitudes of the right brain dominant students in both the experimental and control groups changed positively. Yet, the changes were not statistically significant.

To conclude, as the research results indicated, English language education based on the principles of NLP provided better academic achievement and a more positive attitude towards learning English.

When students' academic achievements were taken into account with regard to the brain dominance as a variable, while no significant difference was observed between the left brain dominant students both in experimental and control groups, significant differences were observed between the right brain dominant students in favor of the experimental group, who received NLP based education. Among some of the reasons for this, it can be considered that there is parallelism between NLP principles and right brain learning strategies and cognitive learning skills.

When the students' attitudes were compared by taking the same characteristics into consideration, while there were no significant differences between the left-brain dominant students in the experimental and in the control groups. There were significant differences between the right brain dominant students in experimental group, who received NLP based education and those in the control group in favor of the NLP group.

When the groups were examined within themselves as left-right brain dominant, there were no statistically significant differences between them even though right brain dominant students in the experimental group showed more positive attitude towards learning English.

Along with these research findings, the following suggestions can be offered to educators, families, education planners and managers, language teachers and coursebook writers and those who will do research in this field:

- It is highly important that the characteristics of the brain dominance be familiar to the
  families and educational institutions will positively affect the relations in the family.
  The fact that a diversity of education which is designed by taking the characteristics of
  both brain hemispheres into consideration is given to the students at the educational
  institutions is to increase the success and provide the students with more positive
  attitudes towards learning.
- 2. The research results indicate that right brain dominant learners benefit more from NLP based instruction both in academic success and their attitudes towards learning English; it could be inferred from the research, though highly probable yet not statistically proven, that the left brain dominant students might benefit more from traditional education. If the classes are formed by taking, the students' hemispheric dominance into account, students' success in education can be affected. Where this is not a possibility, in other words, when the teachers have to deal with mixed classes in which there are students from both hemispheric dominance, it is considered to be appropriate that besides NLP based education, traditional education is to be practiced.
- 3. Knowing students' characteristics and taking these characteristics into consideration while planning and practicing educational procedures will enhance students' positive

- attitudes; when the students' attitudes are more positive towards learning, their academic achievement will be higher.
- 4. When the more humanistic approaches to language teaching such as the procedures designed according to the principles of NLP are used in language education, it might contribute to the solution to the problem of what classroom instruction lacks. This problem is lacking suitable language teaching methods and techniques, which are considered to be one of the problems of the educational system about which many people complain.
- 5. When NLP is used as the subject of future research, the results will contribute to support the theoretical aspect of NLP which will result in the transition of a technique that gets effective results into forming a method.

#### References

Altunay, U. (2002). "Ön Örgütleyicilerin ve Öğrenci Tutumlarının İngilizce İronik Metinlerin Anlaşılması Üzerine Etkileri." Yayımlanmamış Doktora Tezi., Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.

Brown, H. D. (2000). Principles of Language Learning and Teaching (4th Edition). Addison Wesley: Longman.

Cameron-Bandler, L. (1986). The Emotional Hostage: Rescuing Your Emotional Life. N. J: Real People.

Cleveland, B. (1987). Master teaching techniques. Georgia: Connecting Link Pres.

Davis E. C., Hafsah N. & Ruru S. A. A. (1994). Helping teachers and students understand learning styles. *Forum*, 32(13), July-September 1984, p. 12.

Gibson, K. M.(2002). Learning styles and hemispheric dominance - right or left brain: which is dominant in your family? Retrived in July 2002 from (http://www.leapingfromthebox.com/art/kmg/learningstyles2.html) Retrived in November 2005 from (http://www.testcafe.com/lbrb/).

Grendler, M. E. (2005). Learning and Instruction: Theory into Practice. New Jersey: Pearson Prentice Hall.

Gün, N. (2001). Nlp: zihninizi kullanma kılavuzu. İstanbul: Kuraldışı Yayıncılık.

Gün, N. (2002). Nlp ile satış ve pazarlama. İstanbul: Kuraldışı Yayıncılık.

Gün, N. (2003). Nlp: kadınlar ve erkekler nasıl anlaşırlar? İstanbul: Kuraldışı Yayıncılık.

Heaton, J. B. (1990). Writing English Language Tests. Longman: Longman Handbooks For Teachers.

Hergenhahn, B. R. And Olson, M. H. (2005). An Introduction to Theories of Learning. London, Pearson Education Limited.

Huges, A. (2003). Testing for language teachers. Cambridge: Cambridge University Pres.

Jensen, E. (1995). The learning brain. Turning Point, Del Mar, CA, USA.

Kök, İ. (2005). "Sinirdilbilimsel programlama ilkelerine uygun öğretim ile geleneksel öğretimin öğrencilerin İngilizce öğrenmeye yönelik tutumları ve akademik başarıları üzerindeki etkilerinin karşılaştırılması." Yayımlanmamış Doktora Tezi, Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, İzmir.

Krashen, S. D. (1988). Second Language Acquisiton and Second Language Learning. Hertfordshire: Prentice Hall International.

Lightbown, P.M & Spada, N. (2003). How Languages Are Learned. Oxford: Oxford University Press

O'Connor J. & Lages, A. (1984). Nlp ile koçluk. (Çev. Mehmet Zaman). İstanbul: Hayat Yayınları.

Revell, J. & Norman, S. (1996). In Your Hands: NLP in ELT. London: Safire Press.

Revell, J. & Norman, S. (1999). Handing over: NLP Based Activities for Language Learning. London: Safire Press.

Vitale, B. M. (1982). Unicorns are real: a right-brained approach to learning. Jalmar Press.

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